

CURRICULUM VITAE FOR KIM E. HUMMER

RANK AND TITLE: Supervisory Research Horticulturist
POSITION: Research Leader and Curator
ADDRESS: USDA-ARS National Clonal Germplasm Repository
33447 Peoria Road, Corvallis, OR 97333-2521
Phone: 541.738.4201 Fax: 541.738.4205
email: khummer@ars-grin.gov

EDUCATION

1974 B.S. Biology, cum laude. St. Lawrence University, Canton, NY.
1978 M.S. Plant and Soil Sciences. University of Vermont, Burlington, VT.
Thesis: Forsythia flower bud cold hardiness
1981 Ph. D. Horticulture. Oregon State University, Corvallis, OR.
Thesis: Acclimatization of in vitro cultured apples and plums.

PROFESSIONAL EXPERIENCE

1989-Present Research Leader, USDA-ARS National Clonal Germplasm Repository, Corvallis, OR.
1987-1989 Curator, GS-11 Category IV, USDA-ARS National Clonal Germplasm Repository, Corvallis, OR.
1983-1987 Research Associate, supervised by Dr. Harry Lagerstedt, Department of Horticulture, Oregon State University, Corvallis, OR.
1979-1981 Graduate Research Assistant, supervised by Dr. Les Fuchigami, Department of Horticulture, Oregon State University, Corvallis, OR.
1978-1979 Laboratory Technician, supervised by Dr. Norman Pellett, Department of Plant and Soil Science, University of Vermont, Burlington, VT.
1976-1978 Graduate Research Assistant, supervised by Dr. Dean R. Evert, Department of Plant and Soil Science, University of Vermont, Burlington, VT.

RESEARCH

Major Research Interests:

Broad assignment is the study of genetics and germplasm of temperate fruit and nuts and minor crops, specifically: *Actinidia*, *Asimina*, *Corylus*, *Fragaria*, *Humulus*, *Juglans*, *Lonicera*, *Mentha*, *Pyrus*, *Ribes*, *Rubus*, *Vaccinium* and other related genera. Research projects have included studies of botanical and horticultural systematics and plant physiology. Specialty research interest concerns the evaluation and characterization of *Ribes* species and cultivars for morphological, phenological and disease traits.

Main Funding Source

USDA-ARS CRIS 5358-21000-033-00D Collect, preserve, distribute and evaluate genetic resources of 30 temperate fruit, nut, and specialty crops and develop methods to store clonal germplasm as in vitro cultures at room temperature, 4°C or in liquid nitrogen.
Total: \$ 1,442,365 annual budget.

Plant Expeditions and Foreign Collaboration

- 1978 Sponsored by University of Vermont to collect *Rhododendrons* and azaleas from the Smoky Mountains in South Carolina.

- 1991 Sponsored by USDA ARS NCGR and by China – Germplasm Exchange activities with Nanjing Botanical Garden, Nanjing China
- 1991 Sponsored by USDA ARS NCGR and Toyama University – Germplasm Exchange activities and plant collecting near Mt. Toyama, Japan.
- 1992 Sponsored by Italian National Fruit Germplasm Association. Germplasm exchange for pears from Aleghro, Sardinia, Italy.
- 1993 Sponsored by the USDA ARS National Clonal Germplasm Repository. Collecting small fruits (cranberries, blueberries, strawberries) through Maine, New Hampshire and Vermont.
- 1996 Sponsored by the USDA ARS Plant Expedition Funding. To collect small fruits in Cordova, Kenai Peninsula, Kodiak Island and Palmer Vicinity in Alaska.
- 1997 Sponsored by UN Development Project 119/113. Speaker and consultant at Tree Fruit Virus Symposium. Shaanxi Fruit Research Center, Xi'an, China.
- 1998 Sponsored by PL-480 project Germplasm Exchange activities with NBPGR in New Dehli and Shimla, India.
- 2001 Sponsored by the USDA ARS Plant Exploration Funding. To collect small fruits in the Russian Far East, Primorye and Khabarovsk. August 5 to 25, 2001
- 2004 Sponsored by the USDA ARS Plant Exploration Funding. To collect small fruits in Hokkaido, Japan. July 7 through 28, 2004.
- 2004 Sponsored by OIRP Consult for Technical Working Group of the Azores Cooperative Initiatives Program (ACIP) in Ponta Delgada, S. Miguel Island and Terceira Island, Portugal, concerning potential new small fruit crop planting and experimentation.
- 2005 Sponsored by RED-BIOS UN/FAO speaker on Berry crop conservation. Buenos Aires, Argentina. June 7-10.

Journal Articles from 2002 through 2005

1. Moyer, R., K. Hummer, C. Finn, R. Wrolstad, and B. Frei. 2002. Anthocyanins, phenolics, and antioxidant capacity in diverse small fruits: *Vaccinium*, *Rubus*, and *Ribes*. J. Agric. Food Chem. 50: 519-525.
2. Picton, D. D. and K. E. Hummer. 2003. Oil application reduces white pine blister rust severity in black currants. Small Fruit Review. 2(1): 43-49.
3. Reed, B. M. and K. E. Hummer. 2002. Genetic stability of strawberries in culture. pp. 98-101. In: S. Hokanson and A. Jamieson, (eds.) Strawberry Research to 2001. Proceedings of the 5th Strawberry Research Workers Conference. ASHS Press. Alexandria, VA.
4. Hummer, K. and D. D. Picton. 2002. Pine blister rust resistance screening in *Ribes* germplasm. Acta Horticulturae 585(1):287-291.
5. Sabitov, A. Sh., I. O. Vvedenskaya, and K. E. Hummer. 2002. *Ribes* from the Russian Far East: Perspectives for Breeding. Acta Horticulturae. 585(1):161-165.
6. Moyer, R. K. Hummer, R. Wrolstad, C. Finn. 2002. Antioxidant compounds in diverse *Rubus* and *Ribes* germplasm. Acta Horticulturae. 585(2) 501-505.
7. Hancock, J. F., C. A. Finn, S. C. Hokanson, J. J. Luby, B. L. Goulart, K. Demchak, P. W. Callow, S. Serce, A. M Schilder, and K. E. Hummer. 2001. A multi-state

- comparison of native octoploid strawberries from North and South America. J. Amer. Soc. Hort. Sci. 126(5):579-586.
8. Hummer, K. E. 2002. Currants. In: W. Okie (ed.) Register of New Fruit and Nut Varieties List 41. HortScience 37(2): 256.
 9. Hummer, K. E. and D. E. Picton. 2002. Comparison of Control of Powdery Mildew in Gooseberries. Proceedings of the Northwest Center for Small Fruits Research. 10:26-27.
 10. Hummer, K. E. 2002. Wild Berries of the West – A Review. Fruit Gardener 34 (3):13.
 11. Hummer, K. E. 2002. As American as Blueberry Pie. Fruit Gardener 34 (3): 6-7, 13.
 12. Hummer, K. E. 2002. Review of the Compendium of Nut Crop Diseases in Temperate Zones. HortTechnology 12(3):519-520.
 13. Hummer, K. E. and H. B. Lagerstedt. 2002. ‘Ennis’ Hazelnut. J. Amer. Pom. Soc. 56(4):194-196.
 14. Hummer, K. E. and D. Barney. 2002 Currants: Comprehensive Crop Report. HortTechnology 12(3):377-387.
 15. Hummer, K. E. 2002. Review of “Compendium of Nut Crop Diseases in Temperate Zones.” HortTechnology 12(3):519-520.
 16. Hummer, K. E. 2002. Maxine Thompson, Wilder Medal Winner. J. Amer. Pom. Soc. 56(4):242-243.
 17. Picton, D. D. and K. E. Hummer. 2003. Control of powdery mildew on leaves and stems of gooseberries. Hort Technology 13(2):365-367.
 18. Postman, J. D., K. E. Hummer, and K. W. Pomper. 2003. Vascular Disease in Oregon Regional Pawpaw Trial. HortTechnology 13(3):418-420.
 19. Hummer, K. E., N. Vorsa, A. Sabitov, P. Cherbukin, and V. Funtova. 2003. Collecting temperate fruits and nuts in the Siberian Far East of Russia. Plant Genetic Resources Newsletter No. 134: 13-17.
 20. Henning, J. A., J. J. Steiner, and K. E. Hummer. 2003. Genetic Diversity among World Hop Accessions Grown in the United States. Crop Science. 44:411-417.
 21. Hummer, K. 2003. Partnerships promoting the conservation of fruit genetic resources. Acta Horticulturae 623:255-259.
 22. Hummer, K. 2004. Pawpaw. Register of Fruit and Nut Varieties, List 42. HortScience. 39(6):1512.
 23. Hummer, K. and A. Sabitov. 2004. Genetic Resistance to currant borer in *Ribes* cultivars. J. Amer. Pom. Soc. 58(4):215-219.
 24. Sabitov, A. and K. E. Hummer. 2004. Summary of Currant Cane Borer Research at the USDA ARS National Clonal Germplasm Repository in Corvallis, Oregon, United States during 2003-2004. *Защита растений* УДК634.72.632.9 pp. 457-462 in: Genetic Resources of Plant-Growing in the Far East: Proceedings of the International scientific conference (25 - 27 August), devoted to the 75-th anniversary of the Far-Eastern Experimental Station of N.I. Vavilov All-Russian Plant Institute: " Perspectives of genetic resource use in crop selection in the Far East". V. P. Tsarenko (ed.). - Vladivostok: Dalnauka.
 25. Hummer, K. 2005. Wild *Humulus* Genetic Resources at the U. S. National Clonal Germplasm Repository. Acta Hort. 668:75-80.

26. Hummer, K. E. 2005. First Int'l *Humulus* Symposium[Summary]. *Chronica Horticulturae* 45(1):22-23.
27. Hummer, K., J. Oliphant, A. W. Taylor, J. Jackson, and M. L. Deinzer. 2005. Xanthogalenol and 4'-O-methylxanthohumol content of some American *Humulus*. *Acta Horticulturae* 668:229-232.
28. Hummer, K. E. and Ed W. Stover. 2005. Trends and Fashions in Fruit Cultivars. *HortTechnology* 15: Accepted 19 March 2005.
29. N.V. Bassil, B. Gilmore, J. Oliphant and K. Hummer and J.A. Henning. 2005. Genbank-derived Microsatellite Markers in Hop. *Acta Horticulturae* 668: 47-52.

Books

- Barney, D. L. and K. E. Hummer. 2005. Currants, Gooseberries, and Jostaberries: a guide for growers, marketers, and researchers in North America. Haworth Press, Inc. Binghamton, NY. 299 pp.
- Hummer, K. E. and J. A. Henning, eds. 2005. First International *Humulus* Symposium. *Acta Horticulturae* No. 668. ISHS, Leuven, Belgium. 300 pp.

Recent Committee Assignments

- Elected as Chairman of the Commission on Plant Genetic Resources for the International Society of Horticultural Science, Rome, Italy. July 2002.
- American Pomological Society, Shepard Committee Chair 2000-2010; Executive Committee, 1998-2005; Vice President 2003, 2004; President of the Society, 2005.
- Associate Editor for HortScience, publication of the American Society for Horticultural Science, term 1999-2003.
- PWA workforce Diversity Committee, August 2004 – 2006.
- Chair, *Humulus* Working Group, Section on Aromatic and Medicinal Plants, International Society for Horticultural Science.